

## PATENT ABSTRACTS OF JAPAN

(11)Publication number : 2002-098676

(43)Date of publication of application : 05.04.2002

(51)Int.Cl.

G01N 30/00  
 B01D 15/00  
 B01D 15/08  
 C07K 1/22  
 C08F230/02  
 C12N 5/00  
 G01N 23/227  
 G01N 33/48  
 // C07F 9/09

(21)Application number : 2000-288106

(71)Applicant : ISHIHARA KAZUHIKO  
NAKABAYASHI NORIO

(22)Date of filing : 22.09.2000

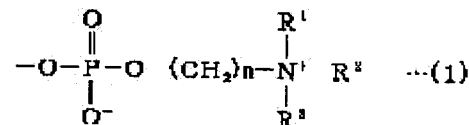
(72)Inventor : ISHIHARA KAZUHIKO  
NAKABAYASHI NORIO

## (54) ISOLATION MATERIAL AND ISOLATION AND RECOVERY METHOD

(57)Abstract:

PROBLEM TO BE SOLVED: To provide an isolation material by which a specific component in a wide range, especially a cell derived from a living body, a protein, an information transmission material or the like, is isolated selectively and by which the component can be recovered and to provide an isolation and recovery method which uses the isolation material.

SOLUTION: The isolation material is provided with a group expressed by formula (1). (In the formula, R1, R2 and R3 represent a 1 to 6C alkyl group or the like, and n represents an integer of 1 to 4). In the isolation material, the ratio (P/C) of the amount P of phosphorus as an element derived from the group in formula (1) to the amount C of carbon as an element is 0.002 to 0.3 in a spectrum obtained by measuring the surface of the isolation material by an X-ray photoelectron spectroscopic analysis. In the isolation and recovery method, the isolation material is brought into contact with a solution containing the specific component, and the specific component is isolated and recovered.



## LEGAL STATUS

[Date of request for examination]

[Date of sending the examiner's decision of rejection]

[Kind of final disposal of application other than the examiner's decision of rejection or application converted registration]

[Date of final disposal for application]

[Patent number]

[Date of registration]

[Number of appeal against examiner's decision of rejection]

[Date of requesting appeal against examiner's decision of rejection]

[Date of extinction of right]

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- 2.\*\*\*\* shows the word which can not be translated.
- 3.In the drawings, any words are not translated.

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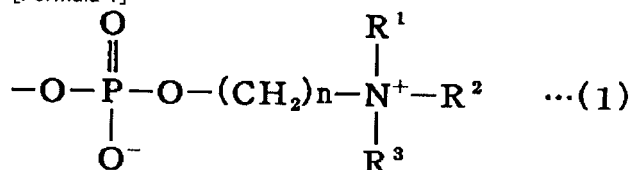
## CLAIMS

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[Claim(s)]

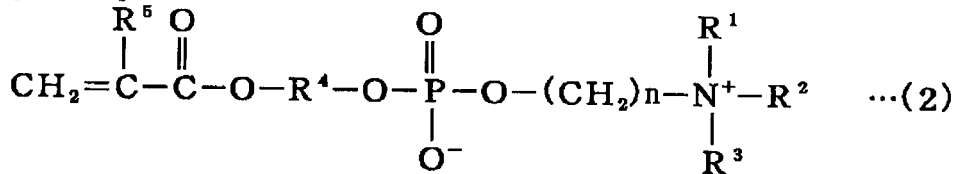
[Claim 1] The amount P of the Lynn element with which it is the separation material which has at least the radical expressed with a formula (1) on a front face, and originates in the radical in the spectrum with which this separation material measured the front face by X-ray-photoelectron-spectroscopy analysis expressed with a formula (1) Separation material characterized by having the radical expressed with the formula (1) of the amount from which a ratio (P/C) with the amount C of a carbon element is set to 0.002-0.3.

[Formula 1]



(Among a formula, R1, R2, and R3 are the same or a different radical, and they show the alkyl group or hydroxyalkyl radical of a hydrogen atom and carbon numbers 1-6.) n is the integer of 1-4. [Claim 2] Separation material according to claim 1 characterized by being the radical to which the radical expressed with a formula (1) originates in the phosphorylcholine similar radical content monomer expressed with a formula (2).

[Formula 2]



(It is that R1, R2, and R3 are the same or a different radical among a formula, and the alkyl group or hydroxyalkyl radical of a hydrogen atom and carbon numbers 1-6 is shown, R4 shows the alkyl group of carbon numbers 1-6, and R5 shows a hydrogen atom or a methyl group.) n is the integer of 1-4. [Claim 3] Separation material according to claim 1 or 2 characterized by being a radical originating in the polymer which comes to carry out the polymerization of the monomer constituent with which the radical expressed with a formula (1) contains the phosphorylcholine similar radical content monomer expressed with a formula (2).

[Claim 4] Separation material according to claim 3 characterized by being the polymer which comes to carry out the polymerization of the monomer constituent with which the polymer which comes to carry out the polymerization of the monomer constituent containing a phosphorylcholine similar radical content monomer consists of (B) hydrophobic monomer 0-90-mol monomer [% and (C) hydrophilic-property] 0-70-mol% phosphorylcholine similar radical content monomer 10-100-mol% expressed with the (A) type (2).

[Claim 5] Separation material given in any 1 term of claims 1-4 characterized by using one sort chosen from the group which consists of the cell, the protein, and the signal transduction matter originating in a living body, or in order to separate two or more sorts alternatively.

[Claim 6] The separation / recovery approach characterized by separating and collecting alternatively one kind or two or more specific components which separation material given in any 1 term of claims 1-4 is contacted in the solution containing a specific component, and are contained in a solution in it.

[Claim 7] The separation / recovery approach according to claim 6 that a specific component is the cell, the protein, or the signal transduction matter originating in a living body.

[Claim 8] The separation / recovery approach according to claim 7 which is one sort chosen from the group which the cell originating in a living body becomes from a corpuscle cell, a stock cell, and a primary culture cell, or two sorts or more.

[Claim 9] The separation / recovery approach according to claim 8 which is one sort chosen from the group which a corpuscle cell becomes from an erythrocyte, a leucocyte, and a platelet, or two sorts or more.

[Claim 10] The separation / recovery approach according to claim 7 that protein is characterized by being an immunoglobulin.

[Claim 11] The separation / recovery approach according to claim 7 that signal transduction matter is hormone, its derivative or environmental hormone, and its derivative.

[Claim 12] The separation / recovery approach according to claim 11 that environmental hormone and its derivative are dioxin and its derivative.

[Claim 13] The separation / recovery approach according to claim 6 that a specific component is the signal transduction matter which affects a living body.

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[Translation done.]